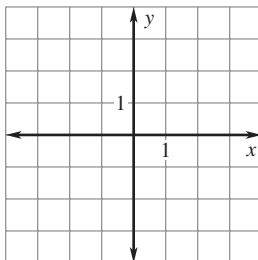
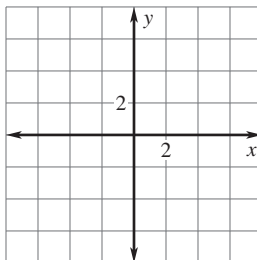


LESSON
9.3**Practice***For use with pages 626–633***Graph the equation. Identify the radius of the circle.**

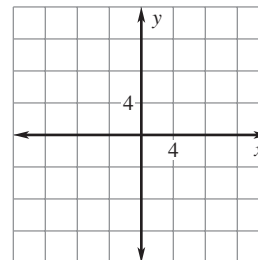
1. $x^2 + y^2 = 9$



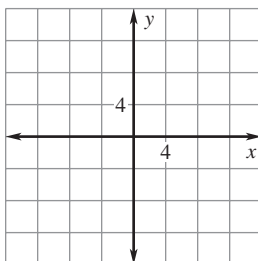
2. $x^2 + y^2 = 20$



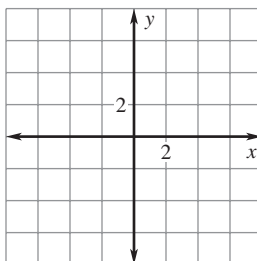
3. $x^2 + y^2 = 64$



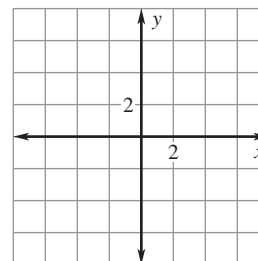
4. $x^2 + y^2 = 50$



5. $5x^2 + 5y^2 = 80$



6. $3x^2 + 3y^2 = 120$

**Write the standard form of the equation of the circle with the given radius and whose center is the origin.**

7. $\sqrt{7}$

8. $2\sqrt{5}$

9. $3\sqrt{10}$

LESSON
9.3**Practice** *continued*
For use with pages 626–633

Write the standard form of the equation of the circle that passes through the given point and whose center is the origin.

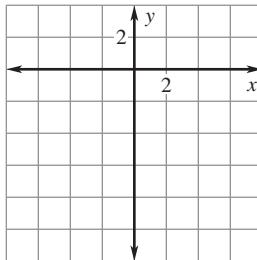
10. $(2, 3)$

11. $(-3, 5)$

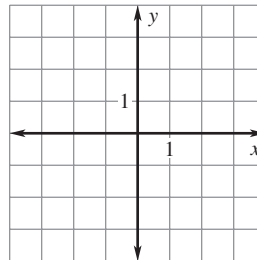
12. $(4, -6)$

The equations of both circles and parabolas are given. Graph the equation.

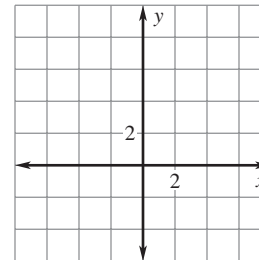
13. $x^2 + 3y = 0$



14. $2x^2 + 2y^2 = 8$



15. $x^2 - 8y = 0$



Write an equation of the line tangent to the given circle at the given point.

16. $x^2 + y^2 = 17$; $(1, 4)$

17. $x^2 + y^2 = 52$; $(-4, 6)$

- 18. Capitol Dome** The Capitol Dome sits atop the Capitol Building in Washington, D.C. The base of the dome is circular with a diameter of 96 feet. Suppose a coordinate plane was placed over the base of the dome with the origin at the center of the dome. Write an equation in standard form for the outside boundary of the dome.